According to Dr. McCarrison, this would indicate that thyroid hyperplasia may result from disturbances at the tissue threshold which are not always controllable by iodine. In this respect they are in marked contrast to those disturbances which result from interference with proper absorption. So far as his investigations permit him to form an opinion, he considers that iodine initiates and maintains the normal cycle of the thyroid gland's activities. It is, so to say, the oil of the thyroid engine, but I do not regard the efficient working of the thyroid mechanism as a matter solely of lubrication, important though this may be.

It is, I believe, rare that any metabolic disorder, such as goitre, is due to a single cause. There is, as a rule, a multiplicity of factors involved; the thyroid gland cannot be considered apart from the rest of the body, nor iodine apart from other food constituents. The time has come when we must search more closely for causes of the thyroid gland's disorder in disturbances at the threshold of absorption in the intestine, at the threshold of utilization in the tissues, and in the cells and tissue plasma of the gland itself.

VIABILITY OF THE BACILLUS TYPHOSUS IN OYSTERS

DURING recent years there have been several outbreaks of typhoid fever which have been attributed to oyster-borne bacilli. As the result of these epidemics investigations have taken place on the viability of the *Bacillus typhosus* in sea water and the length of time this bacillus will remain viable under storage conditions. Stiles, *Bulletin 156*, U.S. Department of Agriculture, September 1912, reported the isolation of typhoid bacilli in two instances of seven and twenty-one days respectively after the removal of oysters from contaminated beds. Very recently the Bureau of Laboratories and Research of the Chicago Department of Health undertook experiments to determine the length of time required for the disappearance of typhoid bacilli from contaminated oysters under various conditions. After twenty-two days a test of the shell exteriors of the live oysters kept in an icebox was made. This examination disclosed that about 50,000 typhoid bacilli were present in 1 cc. of a pint of water used in washing the exterior of the shell. All oysters that were alive as shown by a tightly closed shell were trephined and careful aseptic tests made only on the interiors; bacilli were found in numbers up till the twenty-second day but not after that. The oysters by that time had soured.

The conclusions arrived at were that the longevity of the *Bacillus typhosus* in both shucked and shell oysters in storage varies with the temperature at which they are kept. The temperature best suited for the preservation of the oyster tends to prolong the life of the *Bacillus typhosus* in the oysters. There was no evidence of any bactericidal power or eliminative action against these bacilli observed in living shell oysters during dry storage at forty-five degrees Fahrenheit. The micro-organisms will survive for a longer period than the oyster.

ON GLACIER LASSITUDE*

IN a series of articles to be written by Dr. Leonard Hill and Dr. Argyll Campbell, of the National Institute for Medical Research, some interesting physiological problems of the Mount Everest expedition are to be discussed. The first one, is that of "glacier lassitude" which Major Hingston, the medical officer of

*The Lancet, May 2, 1925, p. 939.